INDEX TO DATE OF ISSUE

Month	Date of Issue	Pages
January	17 February 1976	1–96
April	18 May 1976	97–299
July	8 September 1976	301–400
October	30 November 1976	401–605

INDEX TO DATE OF ISSUE

Month	Date of Issue	Pages
January	17 February 1976	1–96
April	18 May 1976	97–299
July	8 September 1976	301–400
October	30 November 1976	401–605

AUTHOR INDEX

VOLUME 26

Aerts, M., 427
Arden, Sheldon B., 66
Askaa, Gerd, 323

Babinchak, J. A., 82
Bailey, R. E., 1
Baird-Parker, A. C., 333
Balish, E., 498
Barksdale, Lane, 66
Barnes, Ella M., 494
Behrens, H., 561
Benno, Yoshimi, 195, 482
Boeyé, A., 427
Bonev, Stefan I., 79
Bøvre, K., 92, 477, 511
Braden, A. R., 123
Brenner, Don J., 180, 293
Brinton, Lyle P., 554
Brown, J., 498
Burgdorfer, Willy, 554

Cato, Elizabeth P., 205, 230, 494
Clark, William A., 293
Cleven, D., 498
Cole, G. C., 226
Colwell, R. R., 158

Davis, C. P., 498
Diaz, Gilbert A., 38
De Ley, J., 146
Doudoroff, M., 421

Engel, H. W. B., 311
Ernø, Henning, 323
Evans, James B., 17

Falcão, Deise P., 180
Fanning, G. Richard, 180
Farmer, J. J., III, 293
Flossdorf, J., 561
Frøholm, L. O., 511
Fuglesang, J. E., 511

Garvie, Ellen I., 116
Gauthier, M. J., 459
Gerencser, Mary A., 85
Gerencser, V. F., 82
Gordon, Morris A., 296
Goslee, Sarah, 136
Goto, Masao, 467
Grassi, C., 311
Gross, R. J., 76
Gross, W., 311
Guiney, M., 76

Hagen, N., 511
Hájek, V., 401
Hanson, R. S., 226
Hawkins, J., 311
Heed, W. B., 88
Henriksen, S. D., 92, 447, 478
Hill, L. R., 333
Holdeman, L. V., 238
Holten, Eirik, 478
Hudson, B. W., 1

Isani, Bilquis, 253

Jantzen, E., 511
Jenkins, P. A., 311
Johnson, J. L., 230, 238
Johnson, R., 158
Johnson, Raymond, 278
Jones, Dorothy, 102
Jurtshuk, Peter, Jr., 127

Kaneuchi, Choji, 195, 482
Käppler, W., 311
Karczag, Erica, 474
Kariyama, Reiko, 97
Kiyotani, Katsuhiro, 111
Kleeberg, H. H., 311
Kloos, Wesley E., 22, 333
Kocur, M., 332, 333
Konopka, A. E., 505
Krasnow, I., 311
Krichevsky, Micah I., 278
Krieg, N. R., 253
Krywolap, George N., 301
Kushner, D. J., 53

Langford, E. V., 212
Lapage, S. P., 600, 601
Laughon, Barbara E., 253
Leveritt, W., 442
Lewis, Bobby J., 305
Linn, D. M., 253

McQuitty, Donald N., 127
Madin, Stewart H., 545
Mair, N. S., 337
Marton, M., 105
Meyer, J., 487
Middleton, Carol A., 269
Miller, M. W., 88, 286, 326
Miranda, Mary, 88, 326
Mitsuoka, Tomotari, 195, 482
Miwatani, Toshio, 97
Moore, R. L., 283, 505, 522
Moore, W. E. C., 238
Murray, R. G. E., 296

Nel, E. E., 311
Novitsky, T. J., 53

Oeding, P., 333
Ogawa, Midori, 97
Onoviran, O., 212

Page, Lawrence R., 301
Palleroni, N. J., 319, 421
Pate, J. L., 269
Patt, T. E., 226
Pattyn, S. R., 311
Pechman, Kenneth J., 305
Perry, Jerome J., 220
Phaff, H. J., 88, 326
Phillips, Walter E., Jr., 220
Pier, Gerald B., 545
Prauser, H., 58
Prosser, Barbara La T., 319

Quan, T. J., 1

Raj, H. D., 528
Ralston-Barrett, E., 421
Reichenbach, H., 561
Richards, P. A., 311
Rogosa, Morrison, 278
Rowe, B., 76
Ruhnke, H. Louise, 212
Rynearson, Tamara Kleeve, 136

Saito, Hajime, 111
Sakazaki, R., 158
Salmon, Carolyn W., 205
Schleifer, Karl H., 22, 333
Sharples, G. P., 45
Shinoda, Sumio, 97
Showalter, S., 311
Simmons, E. G., 604
Skerman, V. B. D., 442
Slack, John M., 85
Slosarek, M., 311
Smith, Rodney F., 22
Sneath, P. H. A., 102, 340
Snell, J. J. S., 451
Soneda, Masami, 286
Sonnenwirth, Alex C., 298
Staley, J. T., 283, 505, 522
Stanley, Patricia M., 522
Starmer, W. T., 88
Steigerwalt, Arnold G., 180
Strength, W. J., 253
Swings, J., 146
Szabó, I., 311
Szabó, I. M., 105

Takeda, Yoshifumi, 97
Tamura, K., 158
Tarnok, I., 311
Terada, Atsushi, 195
Thayer, D. W., 123
Tsukamura, M., 311, 409
Trüper, Hans G., 74

Vandermolen, Gail E., 253
Vergmann, B., 311
von Riesen, V. Lyle, 143

Watanabe, Keiko, 195
Wayne, L. G., 38, 311
Weaver, Robert E., 180
Weiszfeiler, J. G., 474
Williams, F. D., 253
Williams, S. T., 45
Woese, Carl R., 305
Wolinsky, E., 311
Wolinsky, Emanuel, 136

Yamaoka, Koji, 111
Yoneyama, Minoru, 286

SUBJECT INDEX

VOLUME 26

Acinetobacter
proposal of minimal standards for new taxa description, 92
Actinomyces bovis Harz 1877
proposal and description of neotype strain, 85
Actinomyces israelii (Kruse) Lachner–Sandoval 1898
proposal and description of neotype strain, 85
Actinomycetales
Nocardioides, new genus, 58
Nocardiopsis, new genus, 487
Actinomycete
Streptosporangium corruzation sp. nov., 45
277F agent
rabbit tick spiroplasma, 554
Altermonas rubra sp. nov.
marine antibiotic-producing bacterium, 459
Anaerobic growth
Staphylococcus species, 17
Anaerobiospirillum
new genus, 498
spiral-shaped bacteria, 498
Ancalomicrobium
DNA homology of strains, 283
Antigens
flagellar, of *Vibrio* species, 97
Aquaspirillum fasciculus
new species, 253
nitrogen-fixing bacterium, 253
Asticcacaulis
phages active against, 269

Bacillus
isolates from North Sea sediments, 427
numerical taxonomy of isolates, 427
Bacteria
nonmotile, ring-forming, 505
Bacterial leaf spot
caused by *Erwinia mallotivora* sp. nov., 467
Bacterial names
first draft of approved lists, 563
Bacteriophages
active against *Asticcacaulis* strains, 269
Bacteriophage typing
of "*Caulobacter* group," 82
Bacteroidaceae
emendation of, 238
Bacteroides clostridiiformis subsp. *clostridiiformis* (Burri and Ankersmit) Holdeman and Moore
transfer to genus *Clostridium*, 205
Bacteroides clostridii subsp. *clostridiiformis* (Burri and Ankersmit) Holdeman and Moore
taxonomic study of, 195
Bacteroides distasonis
reinstatement of species rank, 230
Bacteroides fragilis
reinstatement of species rank, 230
Bacteroides fragilis (Veillon and Zuber) Castellani and Chalmers
designation of neotype strain, 230
Bacteroides hypermegas Harrison and Hansen
designation of neotype strain, 494
Bacteriodes ovatus
reinstatement of species rank, 230
Bacteroides thetaiotaomicron
reinstatement of species rank, 230
Bacteroides thetaiotaomicron (Distaso) Castellani and Chalmers
designation of neotype strain, 230
Bacteroides vulgatus
reinstatement of species rank, 230
Biochemical reactions
characterization of yersiniae by, 180
Book reviews
Actinomyces, Filamentous Bacteria. Biology and Pathogenicity, 296
International Code of Nomenclature of Bacteria and Statutes of the International Committee on Systematic Bacteriology and Statutes of the Bacteriology Section of the International Association of Microbiological Societies, 296
The Role of Culture Collections in the Era of Molecular Biology, 340
Wadsworth Anaerobic Bacteriology Manual, 298
Bovine species
Mycoplasma canadense, 212
Brocothrix
new genus in *Lactobacillaceae*, 102
Budding bacteria
mushroom-shaped, 522
Butyribibrio
emendation, 238
new species, 238

Catalase
mycobacterial, 38
"*Caulobacter* group"
phage typing of, 82
Cellulomonas
serological study, 123
Chloroflexaceae
new family, 74
phototrophic "green" bacteria, 74
Clostridium
new species, 238
Clostridium clostridiiforme (Burri and Ankersmit) comb. nov.
designation of neotype strain, 205
emendation of description, 205
proposal of, 195
Clostridium clostridiiformis (Burri and Ankersmit) comb. nov.
proposal of, 195
Clostridium coccoides
from mice feces, 482
new species, 482
Clostridium symbiosum (Stevens) comb. nov.
proposal of, 195
Coding microbiological data

genera name abbreviations, 278
proposals for abbreviation of genera names, 442
Composite tube medium
DMS agar, 79
Corynebacterium diphtheriae
nitrate reductase activities, 66

Deoxyribonucleic acid
base composition of, from *Nannocystis exedens*, 561
Deoxyribonucleic acid composition
Fusobacterium fusiforme, 301
Fusobacterium polymorphum, 301
Leptotrichia buccalis, 301
Deoxyribonucleic acid homology
of *Ancalomicrobium* strains, 283
of *Prosthemicrobium* strains, 283
of *Pseudomonas alcaligenes* group, 421
Deoxyribonucleic acid hybridization
characterization of yersiniae by, 180
of heterofermentative lactic acid bacteria, 116
Desulfomonas
new genus, 238
Deuteromycotina
Phaffia, new yeast genus, 286
Directory
IAMS, 343
DMS agar
for differentiating *Salmonella* subgenera, 79
new composite tube medium, 79

Edwardsiella tarda
proposal to conserve specific epithet, 293
Enterobacteriaceae
taxonomy, 158
Erwinia mallotivora sp. nov.
causal organism of bacterial leaf spot, 467
Escherichia coli O antigens
relationship to *Shigella* O antigens, 76
Eubacterium
new species, 238

Flagellar antigens
of *Vibrio* species, 97
Fusobacterium fusiforme
DNA composition and hybridization, 301
Fusobacterium polymorphum
DNA composition and hybridization, 301

Immunoprecipitation studies
of mycobacterial catalase, 38
International Association of Microbiological Societies
directory and organization, 343

Kingella denitrificans sp. nov.
description, 451
Kingella gen. nov.
transfer of *Moraxella kingae* Henriksen and Bøvre to, 447
Kingella Henriksen and Bøvre 1976
transfer of some saccharolytic *Moraxella* species to, 451
Kingella indologenes sp. nov.
description, 451
Klebsiella pneumoniae
pectinolytic, indole-positive strains of, 143
Kovacs oxidase test
use in survey of oxidase-positive and -negative bacteria, 127

Lactic acid bacteria
hybridization between DNAs, 116
Lactobacillaceae
Brocothrix, new genus, 102
Leptotrichia buccalis
DNA composition and hybridization, 301

Mallotus japonicus
bacterial leaf spot-infected, 467
Marine bacteria
Alteromonas rubra sp. nov., 459
Members
ICSB Subcommittee on the Taxonomy of Staphylococci and Micrococci, 339
Methylobacterium
new genus, 226
Methylotrophic bacteria
Methylobacterium, new genus, 226
Microbiological data
coding, 278, 442
Micrococcus
nonmotile, ring-forming bacteria, 505
taxonomy, 000
Micrococcus marinus
new species, 528
Minutes
ICSB, Subcommittee on the Taxonomy of Gram-Negative Anaerobic Rods, 335
ICSB, Subcommittee on the Taxonomy of *Pasteurella*, *Yersinia*, and Francisella, 337
ICSB, Subcommittee on the Taxonomy of staphylococci and Micrococci, 332
WFCC, ICCC-III, Executive Board, 600
WFCC, ICCC-III, General Meeting, 601
WFCC, ICCC-III, Newly Elected Executive Board, 604
Moraxella
proposal of minimal standards for new taxa description, 92
Moraxella atlantae
distinction from *Moraxella phenylpyrouvica*, 511
new species, 511
Moraxella kingae Henriksen and Bøvre
transfer to genus *Kingella* gen. nov., 447
Moraxella phenylpyrouvica
distinction from *Moraxella atlantae* sp. nov., 511
Moraxella spp.
transfer to *Kingella* Henriksen and Bøvre 1976, 451
Mushroom-shaped budding bacteria
two new isolates, 522
Mycobacteria
slowly growing, numerical classification of, 409
Mycobacterial catalase
immunoprecipitation studies of, 38
Mycobacterium
niacin and catalase tests, 311
resistance tests to isoniazid, thiophene 2-carboxylic acid hydrazide, hydroxylamine, and *p*-ni-

trobenzoate, 311
techniques for use in systematic bacteriology in, 311
Mycobacterium gordonae
serotypes determined by agglutination, 136
Mycobacterium habana Valdivia et al. 1971
synonymy with *Mycobacterium simiae*, 474
Mycobacterium lepraemurium strain Keishicho
in vitro properties, 111
Mycobacterium marinum
serotypes determined by agglutination, 136
Mycobacterium scrofulaceum
serotypes determined by agglutination, 136
Mycobacterium simiae Karasseva et al. 1965
synonymy with *Mycobacterium habana* Valdivia et al. 1971, 474
Mycobacterium xenopi
serotypes determined by agglutination, 136
Mycoplasma agalactiae supsp. *bovis*
elevation to species rank, 323
Mycoplasma bovis (Hale et al.) comb. nov.
formerly *Mycoplasma agalactiae* subsp. *bovis*, 323
Mycoplasma canadense
new bovine species, 212

Nannocystis exedens
base composition of DNA, 561
Neisseriaceae
Kingella, new genus, 451
Neisseria elongata subsp. *glycolytica*
new subspecies, 478
Nitrate reductase
activities in *Corynebacterium diphtheriae*, 66
Nitrogen-fixing bacterium
Aquaspirillum fasciculus, 253
Nocardioides
new genus, 58
Nocardiopsis
new genus of order *Actinomycetales*, 487
North Sea sediments
Bacillus isolates from, 427
Numerical classification
slowly growing mycobacteria, 409
Numerical taxonomy
of *Bacillus* isolates, 427

O antigens
relationship between those of *E. coli* and *Shigella*, 76
Organization
IAMS, 343

Phaffia
new yeast genus, 286
Phenotypic characterization
Pseudomonas alcaligenes group, 421
Phototrophic bacteria
Chloroflexaceae, new family, 74
Phylogenetic status
Sporosorcina ureae, 305
Pichia scutulata
from tree exudates, 326
new species, 326
Planococcus halophilus
facultatively halophilic coccus, 53
new species, 53
Prosthecomicrobium
DNA homology of strains, 283
Pseudomonas alcaligenes group
DNA homologies, 421
phenotypic characterization, 421

Ruminococcus
new species, 238

Salmonella subgenera
use of DMS agar in differentiating, 79
Serological study
of *Cellulomonas*, 123
Serotypes
of mycobacteria, 136
Shigella O antigens
relationship to *E. coli* O antigens, 76
Spiral-shaped bacteria
Anaerobiospirillum, new genus, 498
Spiroplasma
277F agent, from rabbit tick, 554
Sporosarcina ureae
phylogenetic status, 305
Staphylococcus intermedius
isolated from animals, 401
new species, 401
Staphylococcus sciuri
new species, 22
subspecies of, 22
Staphylococcus spp.
anaerobic growth of, 17
effect of uracil and pyruvate on growth of, 17
from human skin, 17
Streptococcus iniae
beta hemolytic streptococcus, 545
isolated from dolphin, 545
new species, 545
Streptomyces longwoodensis
new species, 319
Streptomyces spp.
type strain description, 105
Streptosporangium corrugatum
new species, 45
unusual actinomycete, 45
Streptoverticillium spp.
type strain description, 105

Thermomicrobium fosteri
hydrocarbon-utilizing obligate thermophile, 220
new species, 220
Torulopsis sonorensis
new species, 88
Type strain description
evaluation of criteria, 105
Streptomyces spp., 105
Streptoverticillium spp., 105

Vibrio
flagellar antigens of species of, 97

Yeast
Phaffia, new genus, 286
Yersinia enterocolitica
characterization of, 180

Yersinia pestis
electrophoretic studies of protein variants of, 1
geographic distribution of protein variants, 1
Yersinia pseudotuberculosis
characterization of, 180

Zymomonas Kluyver and van Niel 1936
numerical analysis, 146
phenotypic description, 146
proposal for improved taxonomy and nomenclature, 146

INTERNATIONAL JOURNAL

OF

SYSTEMATIC BACTERIOLOGY

VOLUME 26

BALTIMORE, MD. 21202

1976

Volume 26 • 1976

International Journal of Systematic Bacteriology

The *International Journal of Systematic Bacteriology*, the official organ of the International Committee on Systematic Bacteriology of the International Association of Microbiological Societies, is devoted to the advancement of the systematics of bacteria yeasts, and yeast-like organisms and to the dissemination of information related thereto. The *Journal* is published quarterly (January, April, July, and October). The annual subscription price is $12 (U.S.) for individuals and $24 (U.S.) for institutions. Single issues are $7 (U.S.). Manuscripts should be submitted to the International Journal of Systematic Bacteriology, 1913 I St., N.W., Washington, D.C. 20006, U.S.A. Instructions to authors are published in the January issue. Correspondence relating to disposition of submitted manuscripts, subscriptions, reprints, defective copies, availability of back issues, lost or late proofs, change of address or incorrect address, and advertising should be directed to the Managing Editor.

editorial panel

Editors ..... **ERWIN F. LESSEL**
Lederle Laboratories, Pearl River, N.Y. 10965

PETER HIRSCH
Institut für Allgemeine Mikrobiologie der Universität Olshausenstrasse 40/60 Angerbau C 1 (V.), D-23 Kiel, Germany

J. G. HOLT
Department of Bacteriology, 205 Science Hall, Iowa State University, Ames, Iowa 50010

HERMAN J. PHAFF
Department of Bacteriology University of California, Davis, Calif. 95616

H. P. R. SEELIGER
Institut für Hygiene und Mikrobiologie der Universität Würzburg Josef-Schneider-Strasse 2, D-87 Würzburg, Germany

V. B. D. SKERMAN
Department of Microbiology, University of Queensland St. Lucia, Queensland 4067, Australia

Managing Editor ..... **ROBERT A. DAY**
Director of Editorial Services ..... **GISELLA POLLOCK**
Production Editor ..... **LINDA ILLIG**
ASM Publications Office 1913 I Street, N.W., Washington, D.C. 20006

officers of the international committee on systematic bacteriology and of the judicial commission (ICSB)

Chairman, ICSB ..... **V. B. D. SKERMAN**
Department of Microbiology, University of Queensland St. Lucia, Queensland 4067, Australia

Vice-Chairman, ICSB ..... **K. BØVRE**
Institute of Medical Biology, University of Tromsø, Sentralsykehuset, Tromsø, Norway

Executive Secretary, ICSB ..... **R. SCHUBERT**
Zentrum der Hygiene, Abt. für Allgemeine- und Umwelthygiene, Paul Ehrlich Str. 40, D-6 Frankfurt/M., Germany

Secretary for Subcommittees, ICSB ..... **H. P. R. SEELIGER**
University of Würzburg, Würzburg, Germany

Editorial Secretary, ICSB ..... **J. G. HOLT**
Department of Bacteriology, 205 Science Hall, Iowa State University, Ames, Iowa 50010

Chairman, Judicial Commission ..... **P. H. A. SNEATH**
University of Leicester, Leicester, England

Vice-Chairman, Judicial Commission ..... **O. KANDLER**
University of Munich, Munich, Germany

Published for the International Association of Microbiological Societies by the American Society for Microbiology.

Second-class postage paid at Washington, D.C., and at additional mailing offices. Made in the United States of America.

Copyright © 1976, International Association of Microbiological Societies. All rights reserved.

Volume 26 Contents for January **Number 1**

Original Papers Relating to Systematic Bacteriology

Electrophoretic Studies of the Geographic Distribution of *Yersinia pestis* Protein Variants. B. W. HUDSON, T. J. QUAN, AND R. E. BAILEY 1

Anaerobic Growth of *Staphylococcus* Species from Human Skin: Effects of Uracil and Pyruvate. JAMES B. EVANS 17

Characterization of *Staphylococcus sciuri* sp.nov. and Its Subspecies. WESLEY E. KLOOS, KARL H. SCHLEIFER, AND RODNEY F. SMITH 22

Immunoprecipitation Studies of Mycobacterial Catalase. LAWRENCE B. WAYNE AND GILBERT A. DIAZ 38

Streptosporangium corrugatum sp.nov., an Actinomycete with Some Unusual Morphological Features. S. T. WILLIAMS AND G. P. SHARPLES 45

Planococcus halophilus sp.nov., a Facultatively Halophilic Coccus. T. J. NOVITSKY AND D. J. KUSHNER 53

Nocardioides, a New Genus of the Order *Actinomycetales*. H. PRAUSER 58

Nitrate Reductase Activities in Lysogenic and Nonlysogenic Strains of *Corynebacterium diphtheriae* and Related Species. SHELDON B. ARDEN AND LANE BARKSDALE 66

Higher Taxa of the Phototrophic Bacteria: *Chloroflexaceae* fam.nov., a Family for the Gliding, Filamentous, Phototrophic "Green" Bacteria. HANS G. TRÜPER . 74

Antigenic Relationships Between *Escherichia coli* O Antigens O149 to O163 and *Shigella* O Antigens. B. ROWE, R. J. GROSS, AND M. GUINEY 76

DMS Agar, a New Differential Tube Medium for Differentiation Within the Genus *Salmonella*. STEFAN I. BONEV 79

Bacteriophage Typing of the "*Caulobacter* Group." J. A. BABINCHAK AND V. F. GERENCSER 82

Proposal and Description of ATCC 13683 and ATCC 12102 as Neotype Strains of *Actinomyces bovis* Harz 1877 and *Actinomyces israelii* (Kruse) Lachner-Sandoval 1898, Respectively. JOHN M. SLACK AND MARY A. GERENCSER 85

Original Papers Relating to the Systematics of Yeasts

Torulopsis sonorensis, a New Species of the Genus *Torulopsis*. M. W. MILLER, H. J. PHAFF, MARY MIRANDA, W. B. HEED, AND W. T. STARMER 88

Matters Relating to the International Committee on Systematic Bacteriology

Minimal Standards for Description of New Taxa Within the Genera *Moraxella* and *Acinetobacter*: Proposal by the Subcommittee on *Moraxella* and Allied Bacteria. K. BØVRE AND S. D. HENRIKSEN 92

Volume 26 Contents for April **Number 2**

Original Papers Relating to Systematic Bacteriology

Flagellar Antigens of Various Species of the Genus *Vibrio* and Related Genera. SUMIO SHINODA, REIKO KARIYAMA, MIDORI OGAWA, YOSHIFUMI TAKEDA, AND TOSHIO MIWATANI 97

Brochothrix, a New Genus Tentatively Placed in the Family *Lactobacillaceae*. P. H. A. SNEATH AND DOROTHY JONES 102

Evaluation of Criteria Used in the ISP Cooperative Description of Type Strains of *Streptomyces* and *Streptoverticillium* Species. I. M. SZABÓ AND M. MARTON ... 105

In Vitro Properties of *Mycobacterium lepraemurium* Strain Keishicho. HAJIME SAITO, KOJI YAMAOKA, AND KATSUHIRO KIYOTANI ... 111

Hybridization Between the Deoxyribonucleic Acids of Some Strains of Heterofermentative Lactic Acid Bacteria. ELLEN I. GARVIE ... 116

Serological Study of *Cellulomonas*. A. R. BRADEN AND D. W. THAYER ... 123

Survey of Oxidase-Positive and -Negative Bacteria Using a Quantitative Kovacs Oxidase Test. PETER JURTSHUK, JR., AND DONALD N. MCQUITTY ... 127

Additional Serotypes of *Mycobacterium scrofulaceum, Mycobacterium gordonae, Mycobacterium marinum,* and *Mycobacterium xenopi* Determined by Agglutination. SARAH GOSLEE, TAMARA KLEEVE RYNEARSON, AND EMANUEL WOLINSKY .. 136

Pectinolytic, Indole-Positive Strains of *Klebsiella pneumoniae*. V. LYLE VON RIESEN. 143

Phenotypic Description, Numerical Analysis, and Proposal for an Improved Taxonomy and Nomenclature of the Genus *Zymomonas* Kluyver and Van Niel 1936. J. DE LEY AND J. SWINGS ... 146

Taxonomy of Some Recently Described Species in the Family *Enterobacteriaceae*. R. SAKAZAKI, K. TAMURA, R. JOHNSON, AND R. R. COLWELL ... 158

Characterization of *Yersinia enterocolitica* and *Yersinia pseudotuberculosis* by Deoxyribonucleic Acid Hybridization and by Biochemical Reactions. DON J. BRENNER, ARNOLD G. STEIGERWALT, DEISE P. FALCÃO, ROBERT E. WEAVER, AND G. RICHARD FANNING ... 180

Taxonomic Study of *Bacteroides clostridiiformis* subsp. *clostridiiformis* (Burri and Ankersmit) Holdeman and Moore and of Related Organisms: Proposal of *Clostridium clostridiiformis* (Burri and Ankersmit) comb. nov. and *Clostridium symbiosum* (Stevens) comb. nov. CHOJI KANEUCHI, KEIKO WATANABE, ATSUSHI TERADA, YOSHIMI BENNO, AND TOMOTARI MITSUOKA ... 195

Transfer of *Bacteroides clostridiiformis* subsp. *clostridiiformis* (Burri and Ankersmit) Holdeman and Moore and *Bacteroides clostridiiformis* subsp. *girans* (Prévot) Holdeman and Moore to the Genus *Clostridium* as *Clostridium clostridiiforme* (Burri and Ankersmit) comb. nov.: Emendation of Description and Designation of Neotype Strain. ELIZABETH P. CATO AND CAROLYN W. SALMON ... 205

Mycoplasma canadense, a New Bovine Species. E. V. LANGFORD, H. LOUISE RUHNKE, AND O. ONOVIRAN ... 212

Thermomicrobium fosteri sp. nov., a Hydrocarbon-Utilizing Obligate Thermophile. WALTER E. PHILLIPS, JR., AND JEROME J. PERRY ... 220

Methylobacterium, a New Genus of Facultatively Methylotrophic Bacteria. T. E. PATT, G. C. COLE, AND R. S. HANSON ... 226

Reinstatement of Species Rank for *Bacteroides fragilis, B. ovatus, B. distasonis, B. thetaiotaomicron,* and *B. vulgatus*: Designation of Neotype Strains for *Bacteroides fragilis* (Veillon and Zuber) Castellani and Chalmers and *Bacteroides thetaiotaomicron* (Distaso) Castellani and Chalmers. ELIZABETH P. CATO AND JOHN L. JOHNSON ... 230

Emendation of *Bacteroidaceae* and *Butyrivibrio* and Descriptions of *Desulfomonas* gen. nov. and Ten New Species in the Genera *Desulfomonas, Butyrivibrio, Eubacterium, Clostridium,* and *Ruminococcus*. W. E. C. MOORE, J. L. JOHNSON, AND L. V. HOLDEMAN ... 238

Isolation and Characterization of *Aquaspirillum fasciculus* sp. nov., a Rod-Shaped, Nitrogen-Fixing Bacterium Having Unusual Flagella. W. J. STRENGTH, BILQUIS ISANI, D. M. LINN, F. D. WILLIAMS, GAIL E. VANDERMOLEN, BARBARA E. LAUGHON, AND N. R. KRIEG ... 253

Isolation and Partial Characterization of Some New Bacteriophages Active Against *Asticcacaulis* Strains. CAROL A. MIDDLETON AND J. L. PATE 269

Abbreviations of Names of Genera Suggested for Coding Microbiological Data. RAYMOND JOHNSON, MORRISON ROGOSA, AND MICAH I. KRICHEVSKY 278

Deoxyribonucleic Acid Homology of *Prosthecamicrobium* and *Ancalomicrobium* Strains. R. L. MOORE AND J. T. STALEY 283

Original Papers Relating to the Systematics of Yeasts

Phaffia, a New Yeast Genus in the *Deuteromycotina* (*Blastomycetes*). M. W. MILLER, MINORU YONEYAMA, AND MASAMI SONEDA 286

Matters Relating to the International Committee on Systematic Bacteriology

Opinion

52. Conservation of the Generic Name *Pediococcus* Claussen with the Type Species *Pediococcus damnosus* Claussen 292

Request for an Opinion

Proposal to Conserve the Specific Epithet *tarda* over the Specific Epithet *anguillimortiferum* in the Name of the Organism Presently Known as *Edwardsiella tarda*. J. J. FARMER III, DON J. BRENNER, AND WILLIAM A. CLARK 293

Announcement

International Register of Computer Projects in Systematics 295

Book Reviews

International Code of Nomenclature of Bacteria and Statutes of the International Committee on Systematic Bacteriology and Statutes of the Bacteriology Section of the International Association of Microbiological Societies. *Reviewed by* R. G. E. MURRAY 296

Actinomyces, Filamentous Bacteria. Biology and Pathogenicity. *Reviewed by* MORRIS A. GORDON 296

Wadsworth Anaerobic Bacteriology Manual. *Reviewed by* ALEX C. SONNENWIRTH . 298

Errata

Recognition of the Iron Bacteria "*Siderocapsa*" as Arthrobacters and Description of *Arthrobacter siderocapsulatus* sp. nov. G. DUBININA AND A. V. ZHDANOV.... 299

DMS Agar, a New Composite Tube Medium for Differentiation Within the Genus *Salmonella*. STEFAN I. BONEV 299

Streptosporangium corrugatum sp. nov., an Actinomycte with Some Unusual Morphological Features. S. T. WILLIAMS AND G. P. SHARPLES 299

Volume 26 **Number 3**

Contents for July

Original Papers Relating to Systematic Bacteriology

Determination of the Deoxyribonucleic Acid Composition and Deoxyribonucleic Acid-Deoxyribonucleic Acid Hybridization of *Fusobacterium fusiforme, Fusobacterium polymorphum,* and *Leptotrichia buccalis*: Taxonomic Considerations. LAWRENCE R. PAGE AND GEORGE N. KRYWOLAP 301

Phylogenetic Status of *Sporosarcina ureae*. KENNETH J. PECHMAN, BOBBY J. LEWIS, AND CARL R. WOESE 305

Highly Reproducible Techniques for Use in Systematic Bacteriology in the Genus *Mycobacterium*: Tests for Niacin and Catalase and for Resistance to Isoniazid, Thiophene 2-Carboxylic Acid Hydrazide, Hydroxylamine, and *p*-Nitrobenzoate. L. G. WAYNE, H. W. B. ENGEL, C. GRASSI, W. GROSS, J. HAWKINS, P. A. JENKINS, W. KÄPPLER, H. H. KLEEBERG, I. KRASNOW, E. E. NEL, S. R. PATTYN, P. A. RICHARDS, S. SHOWALTER, M. SLOSAREK, I. SZABO, I. TARNOK, M. TSUKAMURA, B. VERGMANN, AND E. WOLINSKY 311

Streptomyces longwoodensis sp. nov. BARBARA LA T. PROSSER AND NORBERTO J. PALLERONI 319

Elevation of *Mycoplasma agalactiae* subsp. *bovis* to Species Rank: *Mycoplasma bovis* (Hale et al.) comb. nov. GERD ASKAA AND HENNING ERNØ 323

Original Papers Relating to the Systematics of Yeasts

Pichia scutulata, a New Species from Tree Exudates. H. J. PHAFF, M. W. MILLER, AND MARY MIRANDA 326

Matters Relating to the International Committee on Systematic Bacteriology

Minutes of Meetings

ICSB Subcommittee on the Taxonomy of Staphylococci and Micrococci, 9 September 1975 332

ICSB Subcommittee on the Taxonomy of Gram-Negative Anaerobic Rods, 22 and 23 July 1975 335

ICSB Subcommittee on the Taxonomy of *Pasteurella*, *Yersinia*, and *Francisella*, 17 and 18 September 1975 339

Members of the ICSB Subcommittee on the Taxonomy of Staphylococci and Micrococci 339

Book Review

The Role of Culture Collections in the Era of Molecular Biology. *Reviewed by* P. H. A. SNEATH 340

Errata

Synonymy of *Pseudomonas avenae* Manns 1905 and *Pseudomonas alboprecipitans* Rosen 1922. N. W. SCHAAD, C. I. KADO, AND D. R. SUMNER 341

Taxonomic Study of *Bacteroides clostridiiformis* subsp. *clostridiiformis* (Burri and Ankersmit) Holdeman and Moore and of Related Organisms: Proposal of *Clostridium clostridiiformis* (Burri and Ankersmit) comb. nov. and *Clostridium symbiosum* (Stevens) comb. nov. CHOJI KANEUCHI, KEIKO WATANABE, ATSUSHI TERADA, YOSHIMI BENNO, AND TOMOTARI MITSUOKA 341

Brochothrix, a New Genus Tentatively Placed in the Family *Lactobacillaceae*. P. H. A. SNEATH AND DOROTHY JONES 341

APPENDIX

International Association of Microbiological Societies—Directory and Organization, 1976 343

Volume 26 Contents for October Number 4

Original Papers Relating to Systematic Bacteriology

Staphylococcus intermedius, a New Species Isolated from Animals. V. HÁJEK 401

Numerical Classification of Slowly Growing Mycobacteria. M. TSUKAMURA 409

Phenotypic Characterization and Deoxyribonucleic Acid Homologies of the "*Pseudomonas alcaligenes*" Group. E. RALSTON-BARRETT, N. J. PALLERONI, AND M. DOUDOROFF 421

Numerical Taxonomy of *Bacillus* Isolates from North Sea Sediments. A. BOEYÉ AND M. AERTS 427

Two Alternative Proposals for Abbreviations of Names of Genera Suggested for Coding Microbiological Data. W. LEVERITT AND V. B. D. SKERMAN 442

Transfer of *Moraxella kingae* Henriksen and Bøvre to the Genus *Kingella* gen. nov. in the Family *Neisseriaceae*. S. D. HENRIKSEN AND K. BØVRE 447

Transfer of Some Saccharolytic *Moraxella* Species to *Kingella* Henriksen and Bøvre 1976, with Descriptions of *Kingella indologenes* sp. nov. and *Kingella denitrificans* sp. nov. J. J. S. SNELL AND S. P. LAPAGE 451

Alteromonas rubra sp. nov., a New Marine Antibiotic-Producing Bacterium. M. J. GAUTHIER 459

Erwinia mallotivora sp. nov., the Causal Organism of Bacterial Leaf Spot of *Mallotus japonicus* Muell. Arg. MASAO GOTO 467

Synonymy of *Mycobacterium simiae* Karasseva et al. 1965 and *Mycobacterium habana* Valdivia et al. 1971. J. G. WEISZFEILER AND ERICA KARCZAG 474

Neisseria elongata subsp. *glycolytica* subsp. nov. S. D. HENRIKSEN AND EIRIK HOLTEN 478

Clostridium coccoides, a New Species from the Feces of Mice. CHOJI KANEUCHI, YOSHIMI BENNO, AND TOMOTARI MITSUOKA 482

Nocardiopsis, a New Genus of the Order *Actinomycetales*. J. MEYER 487

Designation of the Neotype Strain of *Bacteroides hypermegas* Harrison and Hansen. ELIZABETH P. CATO AND ELLA M. BARNES 494

Anaerobiospirillum, a New Genus of Spiral-Shaped Bacteria. C. P. DAVIS, D. CLEVEN, J. BROWN, AND E. BALISH 498

Taxonomy of *Microcyclus* and Other Nonmotile, Ring-Forming Bacteria. A. E. KONOPKA, R. L. MOORE, AND J. T. STALEY 505

Moraxella atlantae sp. nov. and Its Distinction from *Moraxella phenylpyrouvica*. K. BØVRE, J. E. FUGLESANG, N. HAGEN, E. JANTZEN, AND L. O. FRØHOLM 511

Characterization of Two New Isolates of Mushroom-Shaped Budding Bacteria. PATRICIA M. STANLEY, RICHARD L. MOORE, AND JAMES T. STALEY 522

A New Species: *Microcyclus marinus*. H. D. RAJ 528

Streptococcus iniae sp. nov., a Beta-Hemolytic Streptococcus Isolated from an Amazon Freshwater Dolphin, *Inia geoffrensis*. GERALD B. PIER AND STEWART H. MADIN 545

Cellular and Subcellular Organization of the 277F Agent, a Spiroplasma from the Rabbit Tick *Haemaphysalis leporispalustris* (Acari: Ixodidae). LYLE P. BRINTON AND WILLY BURGDORFER 554

Base Composition of Deoxyribonucleic Acid from *Nannocystis exedens (Myxobacterales)*. H. BEHRENS, I. FLOSSDORF, AND H. REICHENBACH 561

Matters Relating to the International Committee on Systematic Bacteriology

First Draft of Approved Lists of Bacterial Names 563

Matters Relating to the World Federation for Culture Collections
Third International Conference on Culture Collections

Minutes of Meetings

Executive Board, 15 March 1976 600
General Meeting, 17 March 1976 601
Newly Elected Executive Board, 18 March 1976 604